

VÄSTRA HAMNEN AND GAMLA STADEN

Transport, Mobility & Urban planning (BY260E)

By:

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The two areas where the analysis are taking place in are Västra Hamnen and Gamla Staden. These are two districts that lie in close proximity to each other, but which are created a long time apart. Västra Hamnen is a newly built area, while Gamla Staden is an elderly area, which can be divided in two, the western part of Gamla Staden was constructed in the early 19th century while the eastern part was constructed in the 60's.

The difference in time when the areas are built are shown in the design of the different road types in the areas. In Västra Hamnen it is more clearly planned for all kinds of traffickers, while in Gamla Staden the traffickers are more forced to share the space, especially between cyclists and cars in the eastern part, built in the 1960's.

In the analysis we conducted interviews in both areas to get a clearer picture of the travel habits of residents and the quality of the various components of the different modes of traffic. The interviews were conducted by going around in the two areas and asking people questions about their travel behavior, the answers were then noted and used in different parts in the analysis and proposal for change.

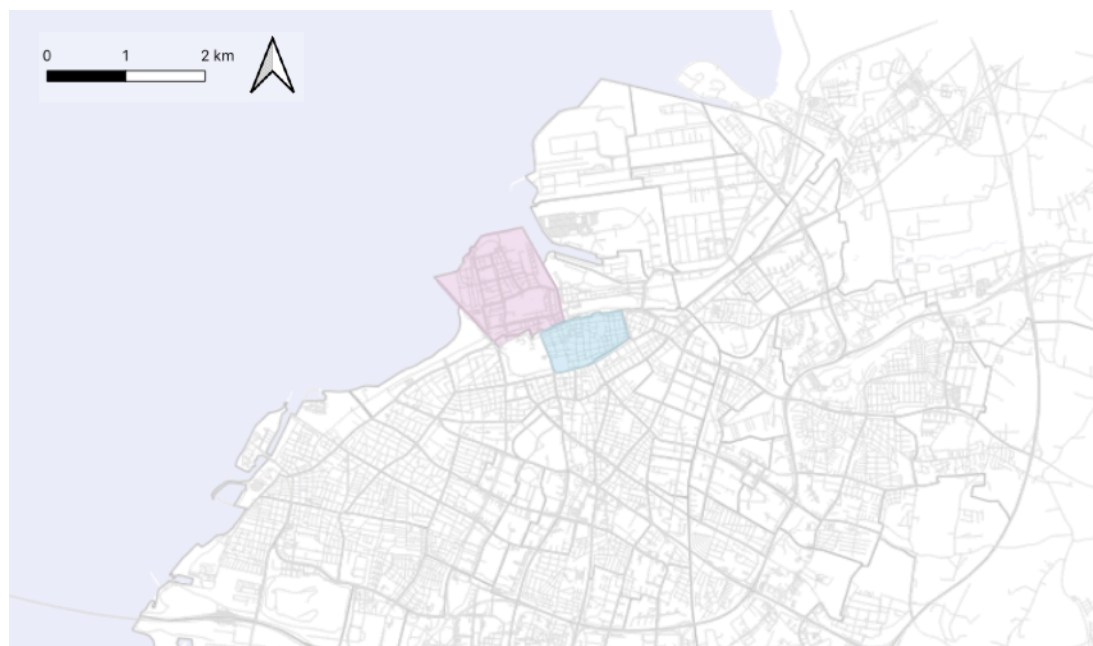


Figure 1.1. Focus neighborhoods in relation to Malmö city



Figure 1.2. Västra hamnen



Figure 1.3. Gamla staden

Statistics for the focus neighborhoods

Our statistics show how the population has developed over the years and how many workers there are in the neighborhoods. The information have been gathered from Malmö stads website.

The first picture represents the population change over the years 2017-2020. Västra hamnen has had an increase in population while Gamla stadens population has decreased. It could be because Västra hamnen is a new neighborhood that is attractive for families with children while the environment in Gamla staden is more hectic and not as suitable for big families, it is also expensive to live in the middle of the city.

The second picture shows how many workers there are in Västra hamnen as well as Gamla staden. There are approximately 500 more workers in Västra hamnen compared to Gamla staden.

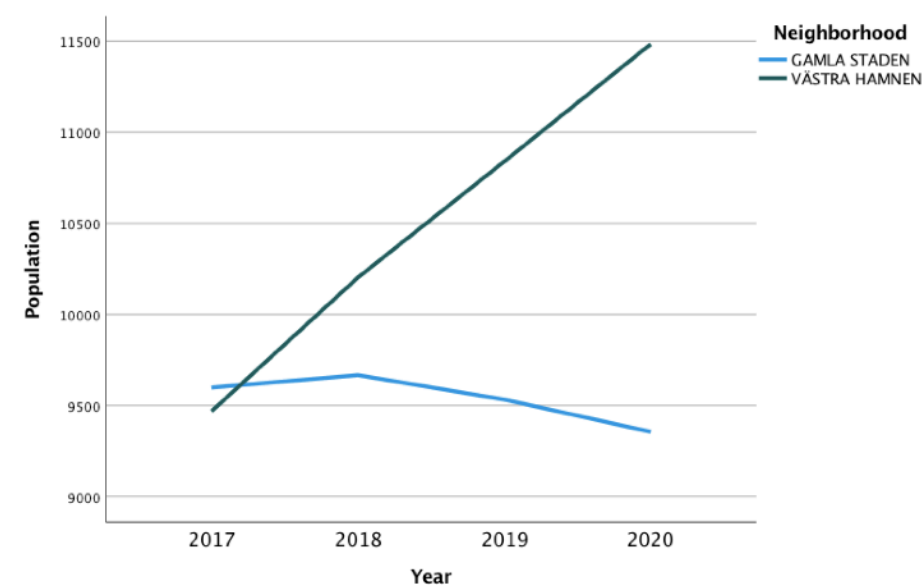


Figure 2.1. Statistics showing population development in the neighborhoods

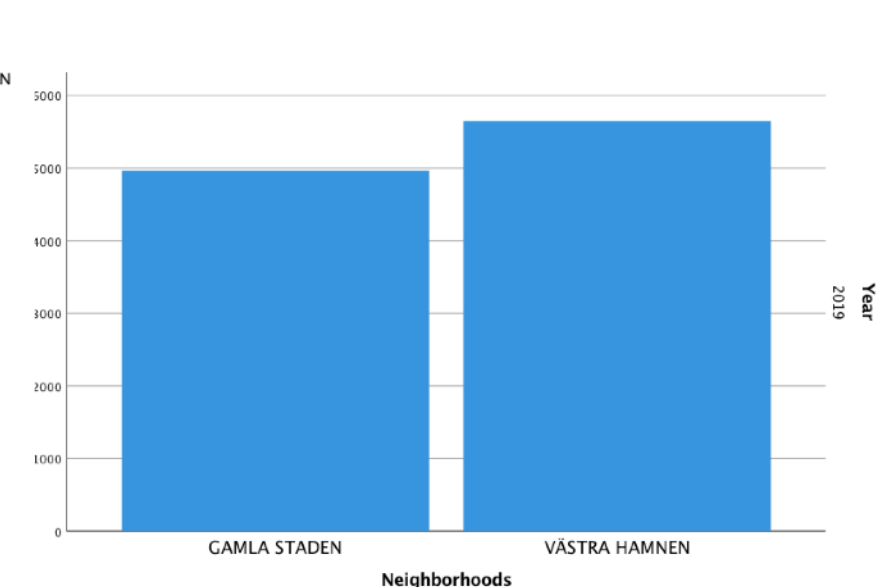


Figure 2.2. Statistics showing the neighborhoods total number of workers

Public transportation

Västra hamnen has four different bus lines in the move every day, line 2, 3, 5 and 8. It takes approximately 7 minutes to travel by bus from the neighborhood to the central station which is connected to almost every part of the city and region. This means that the neighborhood also has good connections to the rest of the city and region, not directly by the lines but since it is close to the central station, it can count as a connection.

Gamla staden has even better connections with the rest of the city and region since the central station is located in it. Some of the bus lines that have routes in the old city are 1, 5, 3, 2, 4, 7, 8. There are even trains that can take you to most places around the region.

Most bus stops are comfortable for the commuters, a lot of them have seats and some of them even have roofs which makes it more comfortable to wait for the bus during bad weather. The transit experience for the commuters seems to be pretty good since the waiting time in between bus arrivals is short for all lines. The waiting time for the different bus lines varies between 5 and 10 minutes in both neighborhoods.



Figure 3.1. Bus lines in the neighborhood. Information gathered from GIS.

Parking opportunities

In the Västra hamnen there is a lot of parking, not only because it's one of Malmö's most attractive area but also because they have a lot of accommodation. For the most part, there are parking garages, they all have good quality and are very efficient for residents but also for visitors. They are well maintained and regularly someone who keeps track, these parking garages are located at a good distance from each other and close to each residential area, so everyone has their own. There is a lot of street parking, and prices vary depending on the season and time, this practice benefits the owner of the source of income. Free parking can cost taxpayers money and not to the person using it therefore they are good with varying prices during the day and period.

In Gamla Stan there are also parking garages and the same applies as in the Västra hamnen, however, the street parking is in great use and the prices remain the same except on weekends when prices are free in the evening and the use of parking abounds. So overall there is good alternative for the car but it may be difficult to find a free spot and may be expensive.

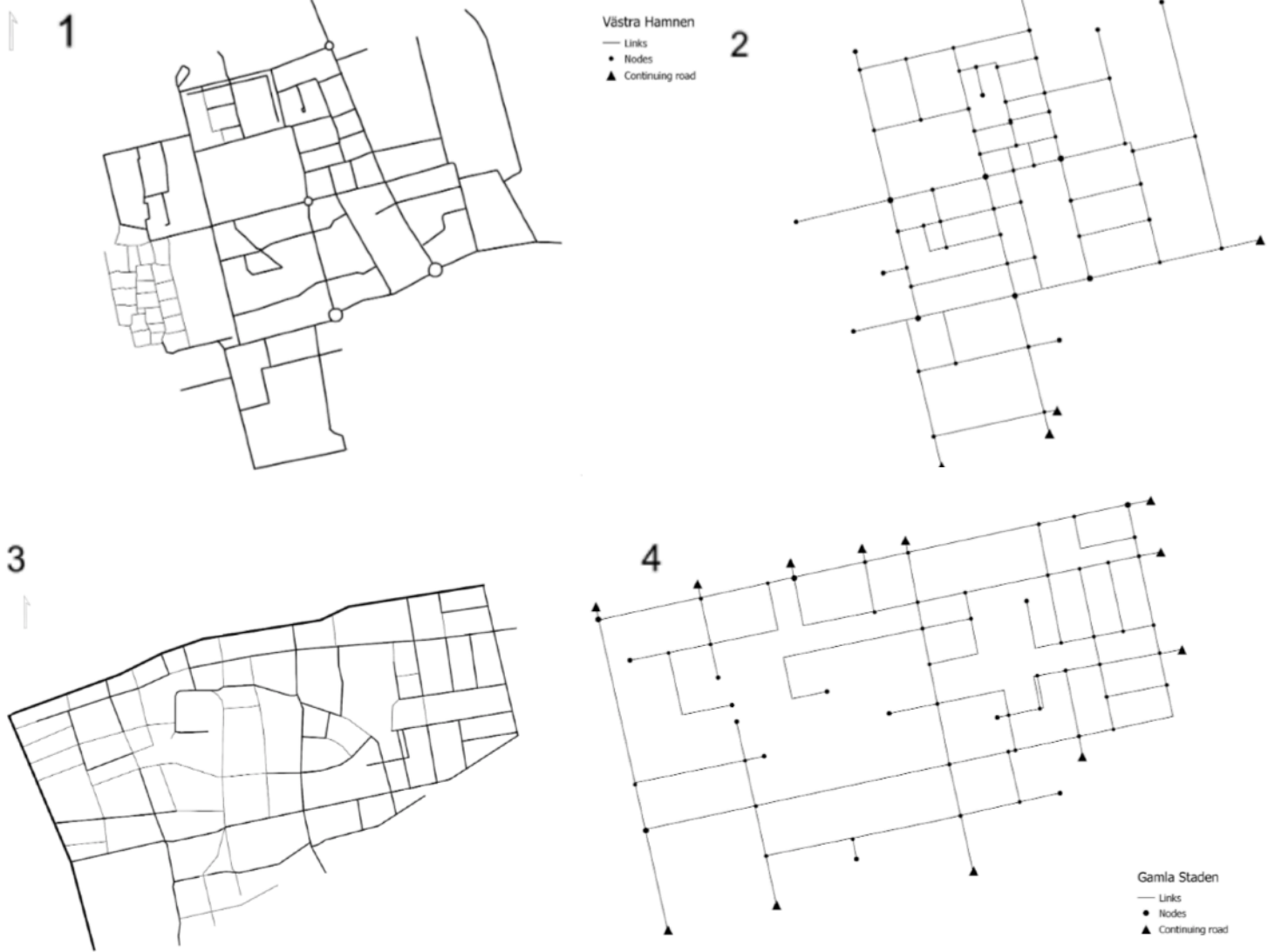


Figure 4.1 Parking in Västra hamnen



Figure 4.2 Parking in Gamla staden

Connectivity



1.Composition of Västra Hamnen, 2. Configuration of Västra hamnen, 3. Composition of Gamla Staden, 4. Configuration of Gamla Staden

Link to node ratio Västra Hamnen: $99/71 = 1,39$; Gamla Staden: $80/59 = 1,35$

The composition shows different sizes of streets. Configuration shows the nodes, links and routes in the area. The configurations are used to calculate link to node ratio. It can then display a number for network connectivity in each area (Marshall, 2005). In this case it is done for car based roads. The result showed that Västra Hamnen(1,39) had slightly higher connectivity than Gamla Staden(1,35) in car bound links and nodes.



Figure 5.1. Street hierarchy in Västra hamnen. Made in QGIS And information gathered from own inventory and google maps

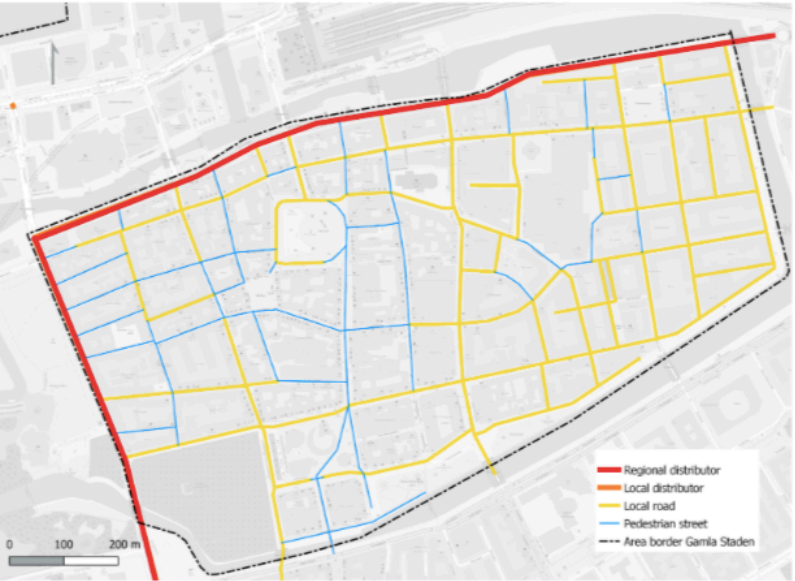


Figure 5.1. Street hierarchy in Gamla staden Made in QGIS And information gathered from own inventory and google maps

The street hierarchy shows that Gamla Staden is the only of the two areas containing a regional distributor street that goes around half the area, which in Gamla Stadens case can function as a barrier because it’s a bigger road with a lot of traffic flow to other parts of Malmö, for example the central station. At the same time in the inner part of the area there is no bigger road except the route through Djäknegatan with a lot of traffic flow, while Västra Hamnen is the only of the two areas with local distributor roads. We can also conclude by looking at the hierarchy maps that there exists a lot of pedestrian streets, but they are concentrated in both areas. Despite this in Västra Hamnen it feels like you as a pedestrian and cyclists still belong to the entire area as much as the cars. This is because of the division of the different street types which creates a safer environment for each type of traffic in relation to each other. In Gamla Staden there are no defined cycle paths, but cyclists have to share space with cars, as pedestrians have sidewalks, which creates two areas made for different traffickers. This sharing between cyclists and cars could create an unsafe feeling, based on an answer by an interview: “No, I don't like cycling in Gamla Staden, there are no good cycle paths there, uh, and then it doesn't feel comfortable to cycle. So I usually get off my bike at Triangeln and lead my bike if I have an errand in Gamla Staden” (Gamla Staden 1).



Divisions in the streets. Photos taken by us.

Bicycle paths



Photos from the eastern part of Gamla Staden showing the sidewalks and the lack of cycle paths as cyclists have to share the road with car traffic.

From the inventory we found that as a pedestrian or cyclist, despite the clearly divided types of paths, you don't feel as comfortable as you can imagine when walking in Västra Hamnen. This is because of all the building projects in the area, making it harder to behave as a pedestrian or a cyclist in many cases as well. For example blocked pedestrian paths or an unpleasant feeling because of all the construction in your surroundings. Mobility could in these cases feel limited or restricted for pedestrians and cyclists.



Some examples of constraints due to construction in Västra Hamnen. Photo taken by us.



Figure 6.1. Bicycle paths in the focus neighborhoods. Made in QGIS, information from inventory and google maps.

It is clear to see that Västra Hamnen is built to carry the capacity of many bikers in comparison to Gamla Staden. In an inventor-analys-walk we found some strictly divided paths in walking, bicycling and cars, the street tiles and grass lanes is something we don't see in Gamla Staden. One thing the divided paths in Västra Hamnen promotes in a good way and Gamla Staden sometimes in a less good way, is the eye contact with strangers. Schiller and Kenworthy (cap 6, 2017) present the eye contact movement as a more well-mannered and healthier city, they give the example what would happen if cars stop stopping for pedestrians as they were about to cross the road and how that in the long run would the social capital for example safety on the streets of the city.



Differences in the divisions in the streets, Västra Hamnen Vs Gamla Staden. Photo taken by us.

Walkability

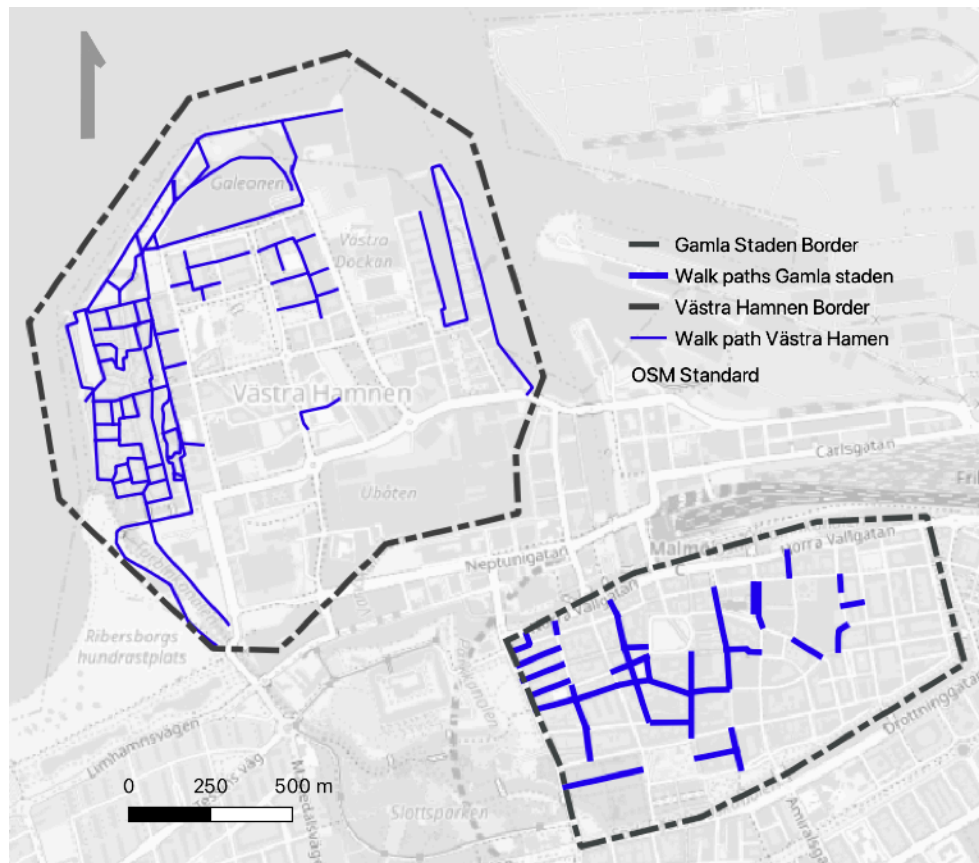


Figure 7.1. Pedestrian streets in the focus neighborhoods. Made in QGIS, information from inventory and google maps

The walkability in both areas is great, the biggest difference is in Gamla staden where the pedestrian streets often are seen with cars in or around them while when we were walking in Västra Hamnens east area we only encountered two or three cars. There is a small difference in quality, since Västra Hamnen is a newly developed area and Gamla Staden was developed in the 1960s’.

Several times in the center of Västra Hamnen we came across construction areas which blocked both the pedestrian and bicycle paths and forced them out in the automobile traffic. The construction elements were exhibited without a further solution, in other words the safety criteria isn't fully fulfilled. Further away we saw a smaller bridge where both the pedestrian and bicycle paths needed to share a small space and the automobiles were a separated path thanks to some elements in the ground and the bridge wall.

Västra Hamnen is a good example of shared space where the walkability and bicycling is promoted and the automobile traffic is separated from both of them. When they are integrated and forced to interact, speed bumps or red lights exist

to protect and keep the pedestrians and cyclists safer and make them feel like they are included in the planning of the city. By promoting the accessibility and mobility of pedestrians and cyclists and less promoting the automobile is hopefully a development that leads to more people moving by foot or bicycle which is both good for the inhabitant and the environment.



Two un-safe roads in Västra Hamnen. Photo taken by us.

Traffic flow

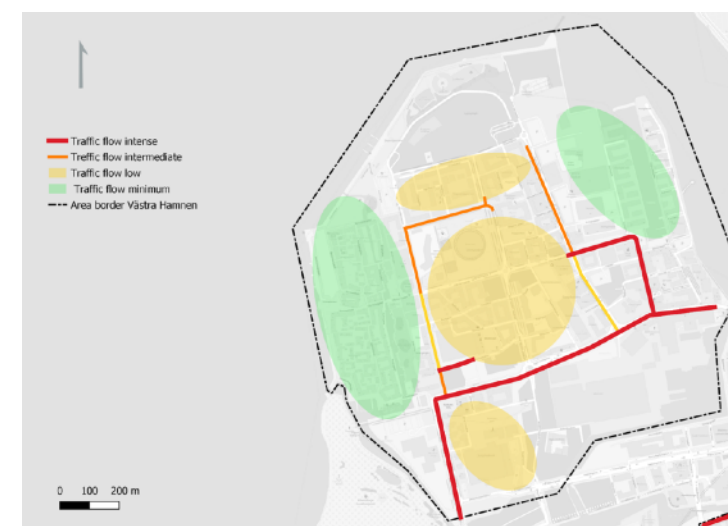


Figure 8.1 Traffic flow in peak hours on weekdays in Västra hamnen. Made in QGIS, information from inventory and google maps.

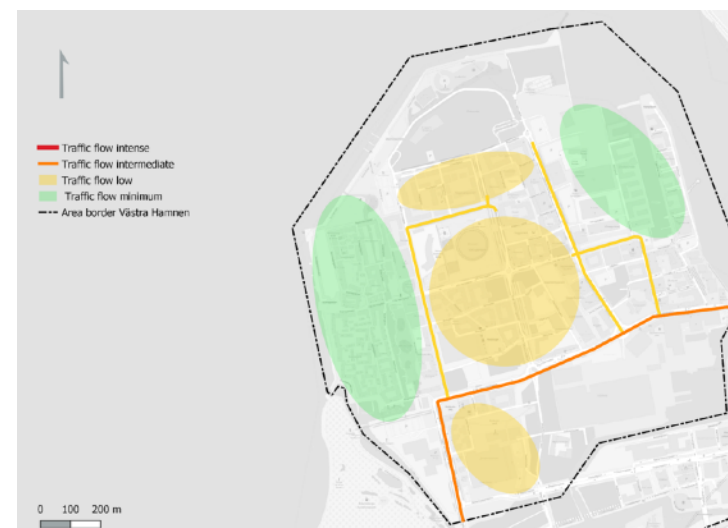


Figure 8.3 Traffic flow in peak hours on the weekend in Västra hamnen. Made in QGIS, information from inventory and google maps.

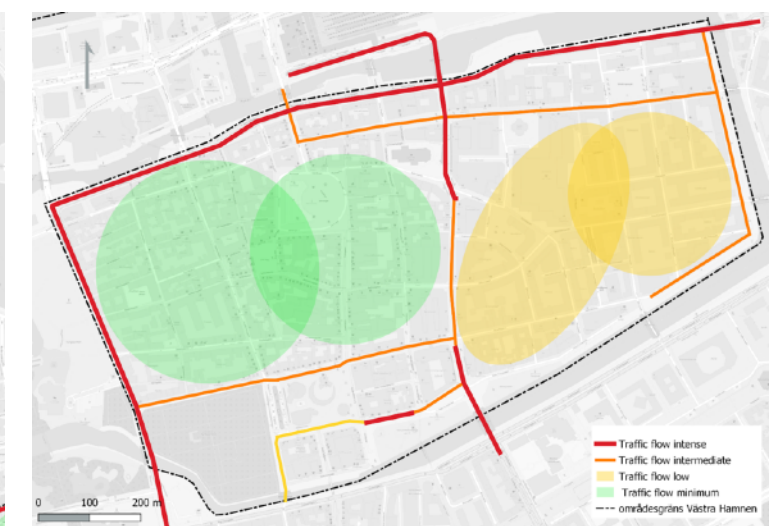


Figure 8.2 Traffic flow in peak hours on weekdays in Västra hamnen. Made in QGIS, information from inventory and google maps.

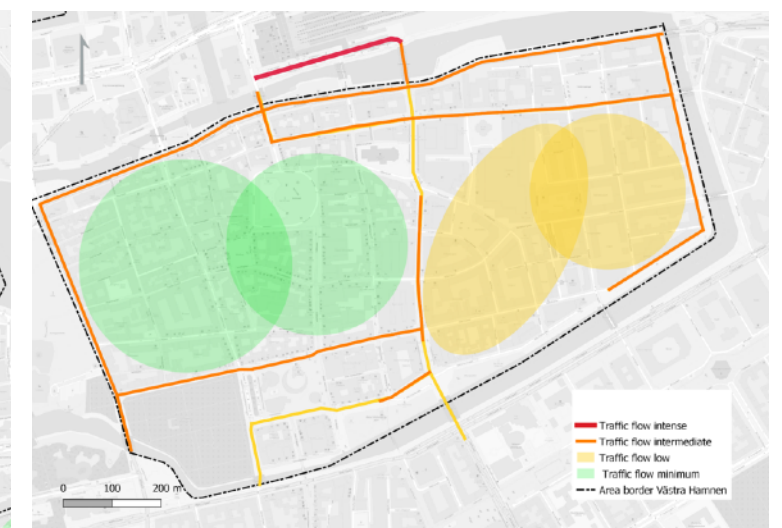


Figure 8.4. Traffic flow in peak hours on the weekend in Gamla staden. Made in QGIS, information from inventory and google maps.

The traffic flow is determined from on-site analysis, Google Maps traffic flow calculator and interviews. This is because we think it’s more accurate and also because Google maps didn’t show the flow on all the roads. The maps for the weekends were mainly based on Google Maps. Google Maps shows the most intensive traffic flow divided in segments of roads, while we have made a similar but more generalized estimation. When we made the map, we marked out the most noticeable and intense roads, and who had any difference in intensity during the week, while the rest of the areas were marked with zoning according to a more general intensity. Instead of marking each road individually. The maps show traffic flow from peak hours through the day.



Figure 9.1 Showing future accessibility form project agreement

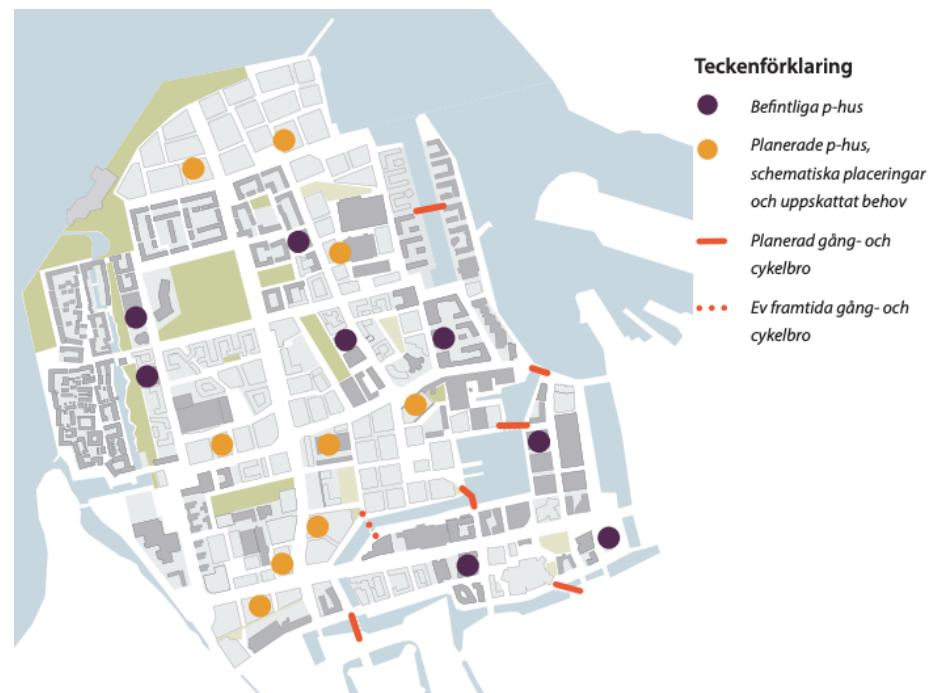


Figure 9.2 Showing future accessibility form project agreement

Framework Agreement 8 Greater Malmö

A very large project in Malmö that has a major impact on the infrastructure, travel pattern and future travel in bicycles, cars and mainly public transport is Framework Agreement 8 Greater Malmö. It is important to have easily accessible infrastructure, to have short distances too stops and close to public transport. They want to make an expansion of buses where they will be four new bus lanes where three will be electric bus lines, environmentally friendly and hazardous vehicle operation with no exhaust fumes and quiet vehicles are a priority. You should invest in the bike as they will create 30 km of new bike lanes, this connects the city better but also provides a combination of public transport when you take the bike to the bus or train.

Västra hamnen is a part that the city of Malmö is really investing in, in their project which is until 2031, they have a lot to change and improve. They want walking, cycling and public transport to account for at least 75% of the residents' journeys and 70% of the journeys to the workplaces. You want it to be walkable, they should have attractive day lanes and safe night lanes. They want to create bridges that increase accessibility.

The bicycle will be given priority and there will be directions for bicycles in all entrances to Västra Hamnen. There must be parking for bicycles in public places and accessibility must be a priority. This creates a connection to central Malmö, which means that the connection between the Gamla staden and the Västra Hamnen is improved. They further develop the ones they start in the Västra Hamnen and create a safe and attractive connection between different parts of Malmö that in the future benefits cyclists, pedestrians and above all the environment.

Jungmannen 4

Another project that has been started in Västra hamnen is Jungmannen 4, which is to build a property but which also affects the travel pattern. You must plan a parking garage and enable a new public street, this street will handle the traffic generated within the area. The purpose of this street is to enable the accessibility of public transport at the intersection and provide space for more greenery. A pedestrian street will also be created, they want to improve accessibility in the area and create movement between Skeppsbyggargatan and the new east-west street. This project is good for the infrastructure, the pattern in Västra hamnen and the accessibility that affects future trips for residents and visitors to the site.



Orienteringskarta med planområdet markerat med svart linje

Makrillen Dp 5565

There are some projects that affect the travel pattern for pedestrians and cyclists. In the plan proposal Makrillen Dp 5565, they plan a recreational route for pedestrians and cyclists in green environments. They also want to secure accessibility in the Västra Hamnen by expanding the major streets. They want to widen Skeppsbyggargatan and make a separate walk & bicycle bridge on the north side of Varvsbron. The purpose of this is to enable the development of street networks that connect the Västra Hamnen with Malmö's central parts. They want to create more urban street spaces where accessibility for pedestrians, cyclists, public transport and car traffic is improved and developed.



Illustrationsplan för området



Illustrationsplan för området. Planområdet markerat med röd streckad linje.

Figure 9.3 Showing the are of project Jungmannen 4

Figure 9.5 showing the are after the project Makrillen

Service Area

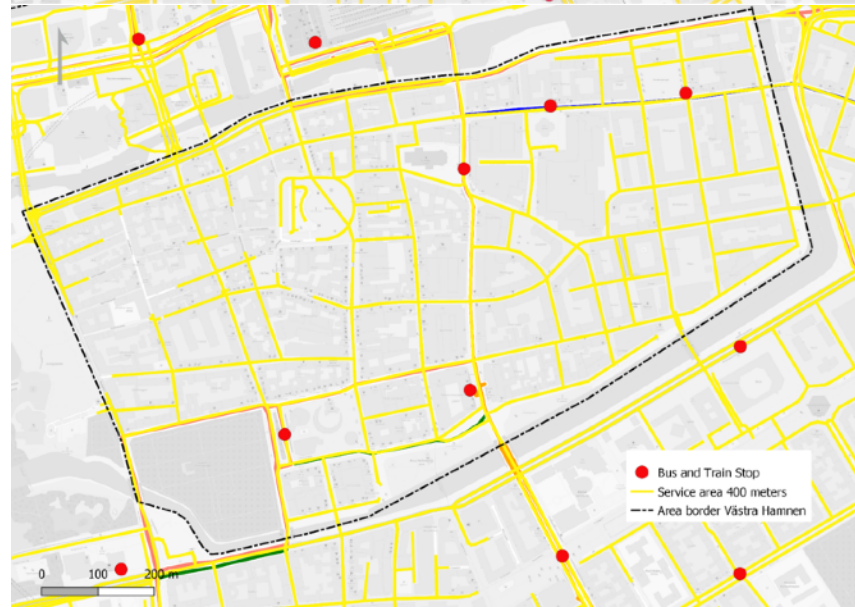


Figure 9.1 Showing buslines from project Agreement 8

Figure 10.1 Service area maps. Top maps shows Malmö by Bike. Bottom maps show Bus and train stops.

High service areas coverage for both bus and bicycle in both areas. This supports a change to emphasize multi-modality. Particular focus for change proposals came to be on cycling, to focus on a proposal that supports sustainable transport development.

Travel patterns in relation to service area and morphology

Figure 10.2 shows the travel patterns of people that were interviewed in the neighborhood's. Since the most common way of traveling in the neighborhood's is by foot or bicycle, the bus and train-stops won't affect their travel pattern a lot. We can however see a pattern between the travel patterns and the Malmö by bike stations. People tend to move past and around the bicycle stations.

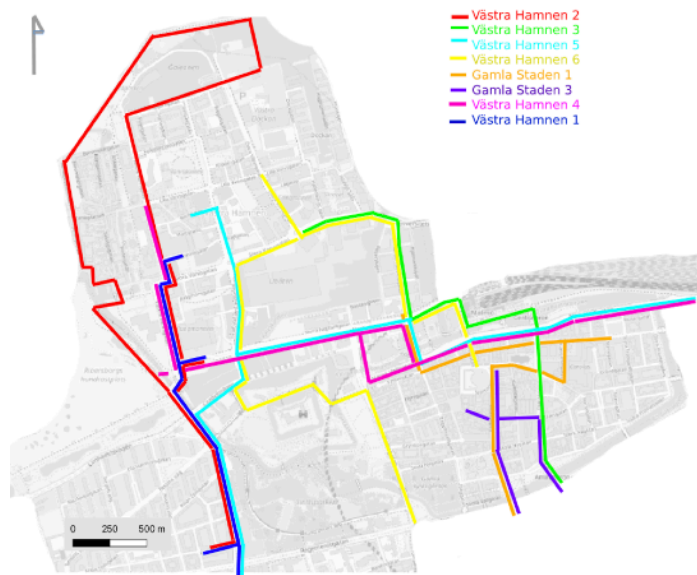


Figure 10.2. Travel pattern results from interviews. Made in QGIS and Photopea

The morphology of the neighborhoods influence the travel patterns as well. Gamla staden has narrow and short streets while Västra hamnen has wider and longer streets. This means that it might be harder to get around Gamla stan since you might have to take detours.



Figure 10.3. Morphology of Västra hamnen



Figure 10.4. Morphology of Gamla staden

Activities

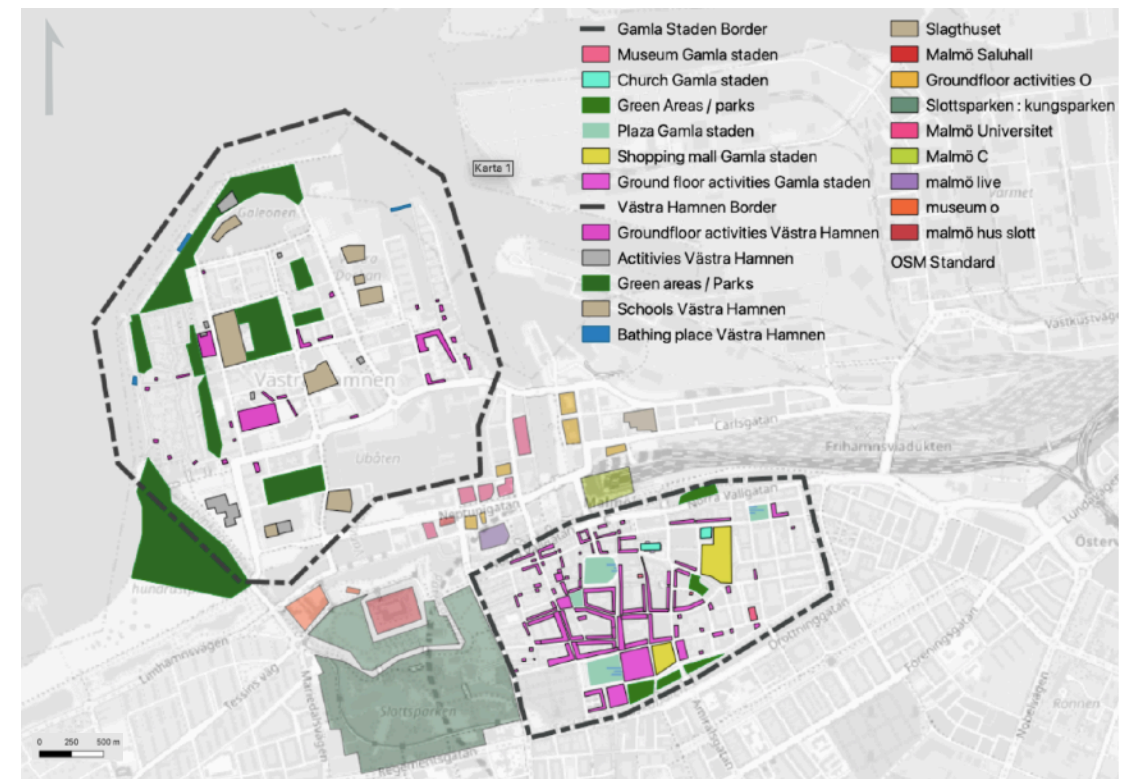


Figure 10.5. Activities in the focus neighborhoods. Made in QGIS, information from inventory and google maps.

By looking at the activity map, we spot a big difference between the two areas and their ground floor activities. Of course in Gamla Staden we have the shopping area and path so when people from all over Malmö need to go shopping or meet up with a friend at a café, Gamla staden is the place to go. There is also a difference between the amount of schools in Västra Hamnen with regard to Gamla Staden, which could indicate there is a bigger number of children living in the area. Then what makes people go to Västra hamnen if they don't live there? A possible activity, especially in the summer, could be the bathing opportunity in Västra Hamnen and also the beautiful walking path which goes around Västra hamnen and is aproxabillity 5 km. Between the both areas we find museum and green areas, but also Malmö central station, buildings of Malmö university and Malmö Live. All these activities outside the areas attract different age groups.

Discussion, comparison and quality

Our two areas differ somewhat in sustainable travel patterns and accessibility. If we also look at the two areas, we notice that the investments from the city of Malmö are different. In Västra hamnen, they invest much more in sustainable travel patterns and accessibility than they do in Gamla staden. This also has to do with the infrastructure as the two areas differ. Västra hamnen invests a lot in public transport and cycling, they want them to be the means of transport for the area and invest in ensuring that there are more cycling opportunities and good public transport. They make it more difficult for cars to drive in and out of Västra hamnen that we have seen in our analysis and interviews from people, which can be a deterrent for commuters who want to get there especially in the summer as they can be a lot of traffic on these roads. Gamla staden, on the other hand, has very few cycle paths if you compare with the Västra Hamnen, the number of roads for cars and public transport are higher than cycle paths, which means that you can get to the Gamla staden from different directions and there are alternatives. However, cycle paths need to be improved in the Gamla staden as the accessibility for bicycles is not good.

Both areas support a future with more accessibility and mobility, the future plans in Västra hamnen are the cycle and the accessibility of public transport will be the main factor for the area. Also in Gamla staden, public transport is a main factor that connects the old city to the rest of Malmö and this is to increase accessibility but also the mobility of other forms such as cycling or walking, this is something we talk about in our analysis part. Our interviews help us to understand that both areas have a developed infrastructure that makes it easy for residents to get around and around in an environmentally friendly way, but from our interviews there are also suggestions that residents would like to change precisely when it comes to accessibility. In the book (A companion to Transport, space and equity, El Geneidy) they tell us that the evaluation of changes in accessibility differs between socio-economic groups as a result of planning or new infrastructure projects. They also believe that accessibility tries to include the spatial distribution of activities and transport systems and it is they who provide a fairness in mobility and accessibility in not only our areas but all.

In Västra hamnen, the street network is good and its strengths are the accessibility for cycling and walking, good roads that connect to each other from different directions and also good accessibility for public transport so they can walk quickly and smoothly. One of the weaknesses for Västra hamnen that we found out from an interview was that car roads to drive in and out of the area were bad, there were not enough alternatives and the alternatives that were available were very busy at certain times. In the old town, on the other hand, they were a bit the opposite, where the forces were just the roads for cars and public transport when you could get into the area easily and there were opportunities. Cycling and walking were also a mixture of strength and weakness as some roads were not sufficiently structured and cycle paths, for example, ran out quickly.

The opportunities in Västra hamnen are great, however, the area is constantly evolving, which means that the opportunities for travel patterns can develop and change over time. Due to this development of new infrastructure in the area, the travel patterns can also be threatened and it can take longer until it is implemented. However, Gamla staden is already fully developed, with streets and buildings which makes the opportunities for developing travel patterns more difficult, however, there are limitations in the old town which means that the travel pattern can not be developed further without a very large project. It is important when proposing new transport investments that you review them carefully and it is the CBA results that play an important role in prioritizing among all investment proposals promoted by local and regional stakeholders (Eliasson et al, 2015).

Proposal of change

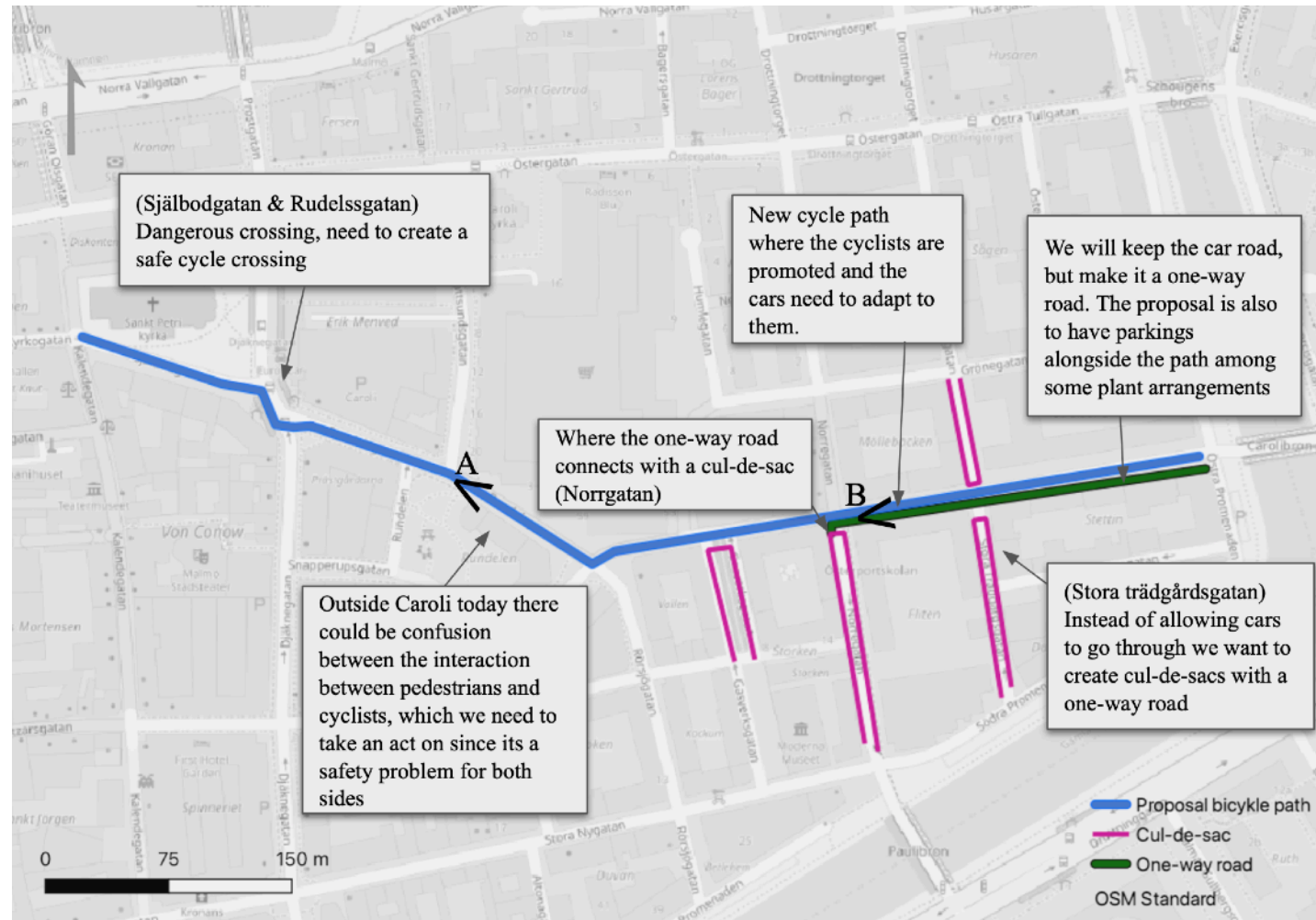


Figure 11.1 Illustration of proposal of change in Gamla Staden. Made in QGIS and Photopea

After we spotted a big difference between Västra Hamnen and Gamla staden and the areas capacity of bicycles, we thought it would be a good proposal to elaborate some of Gamla stadens existing car roads to a longer bicycle path from the center out in the east area. Our proposal involve a change in the streets Själbodgatan, Rudelssgatan and Stora kvarngatan, with that a change also is in need involving the streets that crosses Stora kvarngatan, Norrgatan and Stora trädgårdsgatan. The last two mentioned streets will be redesigned as cul-de-sacs one-way directed streets, also we will allow car traffic on a part of stora kvarngatan, and it will also be developed as a one-way directed street which we hope will have a good impact on the area. Good impact for both safety reasons and health, we were told in one interview “No, I don't like cycling in Gamla Staden, there are no good cycle paths there, uh, and then it doesn't feel comfortable to cycle. So I usually get off my bike at Triangeln and lead my bike if I have an errand in Gamla Staden” (Gamla Staden 1), and with that we hope this kind of change would make the cyclist feel more safe. Spotted in the inventory there is today only one cycle path going through Gamla staden, Kalendegatan (at the left on figure 11.1), and we hope if we connect our new path that leads to the east side of Gamla staden, I would feel more safe bicycling there and also give a better accessibility over a larger area.

Sections



Figure 11.2 Illustration of section on Rundelsgatan in Gamla Staden. Made in StreetMix

(A) Section of our vision on the path outside the mall, Caroli where we want to separate the pedestrians and cyclists to promote a safer path and plan for less incidents. We want to keep the pedestrian path non-controlled for example with different elements in the ground, instead we focus on separating the cyclists from the pedestrians with different elements in the cycle path.

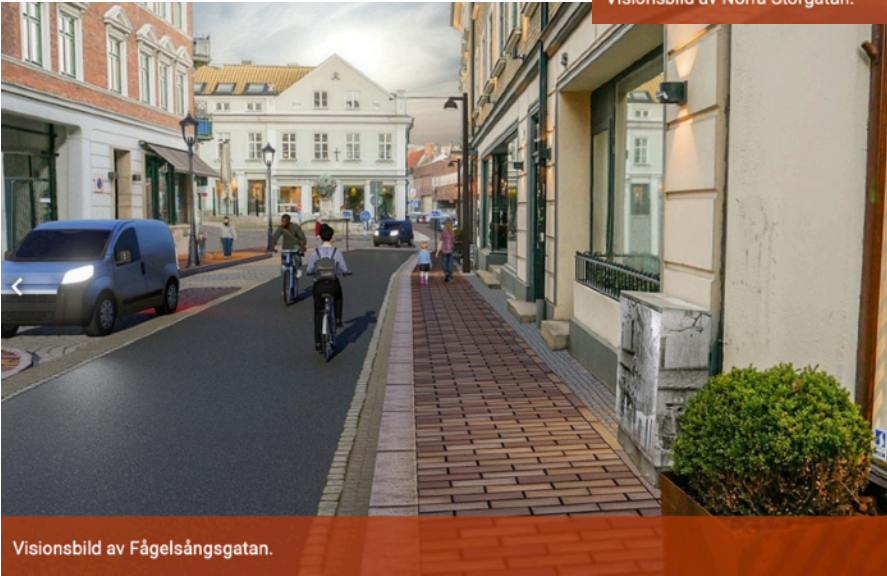


Figure 11.3 Illustration of section on Stora kvarngatan in Gamla Staden. Made in StreetMix

(B) Section of our vision on the paths where cars and cycles are supposed to share the space but promoted by cycling.

Reference Project in Helsingborg

Our inspiration for the proposal was found in a on-going project in Helsingborg Stad where they're developing Fågelsångsgatan och Norra Storgatan (Helsingborg Stad, 2022) . We found similarities in the proposal with our vision and ideas, developing a path where cyclists are promoted and the cars need to adapt. Our proposal includes changes along a path that is today about 750 meters and along the path we will face different challenges regarding larger distribution streets and smaller roads where there is parking along both sides.



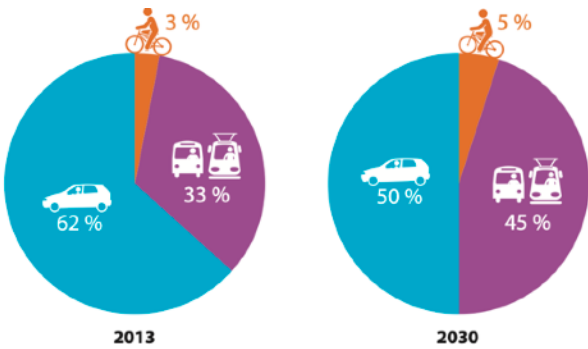
Strategy

To influence the travel behavior towards a more sustainable transport development the strategic proposal is to implement tolls into Malmö. This is to increase the share of cycling and public transport at the expense of car traffic. This is consistent with the objectives of Malmö's traffic and mobility plan.

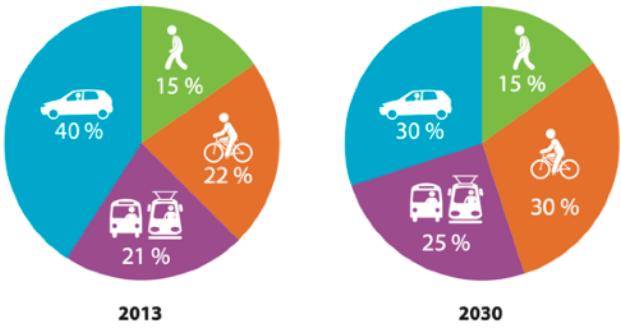
“To enable Malmö's overall objectives, measures are needed that contribute to changing modal shares for both Malmö residents' journeys, commuting journeys and freight transport. The modal split is, for passenger transport, the single most important indicator of a social, environmentally and economically sustainable transport system” (Malmö Stad, 2016)

Our proposal is supported by similar strategies that exist in Sundsvall, Stockholm and Gothenburg. The difference we want Malmö to have is that prices should be lower but still exist for people to choose a more sustainable transport. The money that comes from customs can generate a reduction in tickets for public transport, which can mean that people with bad economy can also afford to take the bus, which is also a motivation for everyone.

Malmö Stad encouraged the method of mobility management in their report ‘Traffic and mobility plan - for a more accessible and sustainable Malmö’ (Malmö Stad, 2016), which could be seen as a part of the new planning paradigm sustainable transportation (ST) and is a positive development of the transportation policy. It shows that cities today are stepping away from the business as usual era (BAU) and with an attempt to make a change in citizens travel behavior, and with the proposal for strategy implementation tolls in different areas of Malmö, we hope that this is something that will affect the travel behavior for car users. This could increase the the usage of other transport modes at the expense of cars.



Goal for in-commuting to Malmö. Diagram from Malmö Stad



Goal for Malmö-citizens travel behavior. Diagram from Malmö Stad

Conclusion

Västra Hamnen is a good area for different transport modes. The area enables different usage of modes because of the good division between them, creating a safe environment for cyclists and pedestrians. The buses also create a good alternative as it has a high frequency and a covering service area which make it easier for people to commute by bus to and from the area. The division between car traffic, cyclists and pedestrians was a positive feature that became a good reason for thinking when then analyzing Gamla Staden. Gamla Staden is also an area with good accessibility for different modes, however the analysis showed a lack of good quality and existence of bicycle paths, leaving cyclists sharing the space with cars. The roads are, mainly in the eastern part of the Gamla Staden, made for cars. Since the streets in the eastern part of Gamla Staden, the part built in the 1960's, is mainly built for car usage you can express that it is more likely planned after the BAU method. While the newly built area Västra Hamnen weighs more towards the ST method (Schiller and Kenworthy, 2018). Focus for change was therefore to emphasize a multi-modality. Particular focus for the change proposal came to be on cycling, to focus on a proposal that supports sustainable transport development.

The proposal is to add a bicycle lane in Gamla Staden which will be connected with the existing bicycle path going through Gamla Staden and provides more accessibility for cyclists also to the eastern part. The new proposal runs from and including Sjöbogatan, through Rundelsgatan and Stora Kvarngatan and is to implement a bicycle lane to give cyclists their own space to use and thereby divide the transport modes in the specified area of change. The change also includes the conversion of Stora Trädgårdsgatan and Gasverksgatan to cul-de-sacs and Norregatan to a one-way road going south. This will reduce the mobility for car traffic and enhance the mobility and access for bicycles to other parts of Gamla Staden. This supports a move to more sustainable transportation.

The implementation of tolls wishes to change the modal shares of cars to less, and to increase the share of cycling and public transport, at the expense of cars. Because of the revenues from the toll, one can possibly take advantage of it to decrease the bus ticket prices, or to use the money for maintenance or development of other infrastructure modes. The tolls can function as an encouragement for car users to change transport mode to bicycle, bus or train. The people still choosing to use the car will pay the toll fare and thereby contribute to a better quality in the development of other transport modes, such as buses for instance. An externality of the toll cost can also be that the delay of buses can decrease, as a lot of private vehicles can slow public transportation down (Shiller & Kenworthy, 2010).

Individual reflections

Stina Rosén

An interesting assignment and course, I have learned a lot! The group assignment has also been interesting, we have done similar group projects but this time with another point of view.

It is always a bit hard to cooperate online, but I think we did a good job in general. The last few days before submission when we met in school the discussions went on well and I think we got some good results out of it. I wouldn't say I had any particular role, because in the beginning we sorted things out and decided which part that was supposed to be made by who, after that we had some checkpoints online where we discussed some problems or just thoughts.

In this assignment I mainly used QGIS creating different maps. In the beginning it was quite hard or confusing since it was a time ago we used QGIS but soon the creation began, I made maps over the bicycle paths and walkability and as support i used both google maps but also my own inventory. In total I was on around four inventory walks to find out different things around the area.

Elias

The assignment in general was good, it's an interesting topic. And the group teamwork was good overall. We divided different parts of the work between the group members in the analysis part, and then met online and talked together about the results of the analysis and its different parts. We then talked and worked together both online and on campus to add together all the information gathered to come up with a coherent analysis part and with a coherent foundation to the proposals, and then come up with a proposal for change and work with that. I don't think there was anyone in the group who had a particularly different role from anyone else. Not everyone did everything together, of course, but everyone had similar roles throughout the work and were four equal parts of the group jigsaw

Maps were mainly done in QGIS through the group work and to illustrate the inventory and analysis. Much of the information that was illustrated through the maps was based on on-site analysis, Google Maps and interviews. The interviews, to gather transportation habits for residents of the areas, were done by walking in the areas and asking people who wanted to answer some questions about transportation modes in the area and their habits. The proposal was based on the analysis and inventory and from the interviews. The inventory and analysis grewed thoughts and comparisons of the pros and cons of the two areas, Västra Hamnen and Gamla Staden. The pros and cons together with the interviews and their thoughts on the neighborhoods gave inspiration for the proposals.

Albin

The assignment we have been given has been good and instructive, we have had to work with two areas that we like. This has helped with the understanding of analyzing an area and also thinking about how to make them better, made us see an area from different perspectives. We divided the work between the group members and have a meeting via online to coordinate and talk so everyone understands and is informed.

Our work continued with online meetings and some time on campus but mostly online because some lived a bit far from school. For the proposal, we were on campus and helped each other but also had different discussions about the work. I do not think that someone had a specific role but of course some did a little more depending on ability and knowledge, as we are all good at different things, I think the group kept a good chemistry and worked well with their parts that made the work easy and fun.

Much of the work was done on QGIS to analyze and produce maps, but other programs and pages were also used to do the work. Some of them were Google maps, interviews, Malmö city website and self location in the area. With the help of these things, we got a picture of the Västra hamnen and the Old Town. When we gathered all the information, read about the interviews and made comparisons with the pros and cons, we started to get inspiration for our proposal.

Emelie

The assignment was both fun and challenging. It felt a bit stressful at times because we had a lot of different assignments to work on simultaneously, but it went well after all. I think the group dynamic worked really well, all of us did our jobs and made it work. I feel like the discussions were really good in the group as well and that made it easier to come up with proposals and thoughts and reflect about them.

We decided to structure the group work by dividing the different inventory and analysis parts between us, so we did work more individually in the beginning but managed to merge it all together in the end. My role in the group was similar to the other group members I would say, we were all equally engaged and made decisions together.

We chose to use one base map for all our illustration maps to make it as clean and coherent as possible, which we used QGIS for. With help from interviews, google maps and other analyzes done on-site we could illustrate how the situation looks like in our neighborhoods. We could easily have a fluid discussion with all the information gathered and I feel like everyone had good thoughts and opinions to share. After discussing pros and cons with the neighborhood and the information we had about them, we could come up with a proposal.

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Interviews used in the project.

Gamla Staden 1

- Woman
- Around 22 years old
- Student
- 8 min travel with bus, 20 min walk
- Destinations she visits often are the University, also Malmö Central station and Värnhemstorget where the transit is good and reaches to all her friends.
- She sometimes takes the bus and the ride is 8 minutes, however she needs to be 5-10 minutes early at the bus stop because she says you can’t trust Skånetrafikens app. She said she had missed the bus around 5 times even though she was at the bus stop 5 minutes early. But often she walks to the University, she says it is a healthier way of going to your destination and does not take any much longer than waiting and taking the bus.
- Otherwise when she is moving around in malmö she takes the bus
- She doesn't own a bike, because she reckons she’s not in need of one.
- Often she is satisfied with taking the bus to different destinations in Malmö, sometimes she says it would be nice having a car when you're for example buying larger stuff or doing larger shopping.
- A proposal of change in the transportation path was something she did not have anything to complain about except the problem with her bus and the transit system in the app which can not clearly do their work with the timetable and the actual arrival of the bus.
-

Gamla Staden 3

- Woman
- 21
- Student
- Going from home to school by bike, 10-15 minutes. Nobeltorget to University Hospital
- Depending on the school schedule. Otherwise bikes to errands in town and for grocery shopping. A few times a week in total.
- Bicycle because it's more convenient and cheaper. Too close to her activities to take the bus. Don't even know if there is a good bus service from her to school(university hospital).
- Can take the bus into town (bus line 5) if the weather is bad. Takes bike to the University regardless.
- No need for a car, close to everywhere. But if you need to take the bus sometime they run all the time
- “Maybe buses stop running early at night: Another night bus, or later departures, would be nice”

Västra Hamnen 1

- Man
- 50 +
- Lives in Ribersborg
- Drives his car to his destinations.
- Lives in Ribersborg - Works at home or in Hyllie - grocery shops in västra hamnen at Maxi 2-3 times a week and often plays paddle also in västra hamnen at the same time.
- He argues that he is getting older and is tired of the need of being on time or at a special place on a special time, for example a bus stop. He also says that he has a house 2h from Malmö and to travel there with two kids and one dog plus all the packing would be impossible.
- The problem of having a car in central Malmö is for him the parking spots, he has a private spot for one of his cars, but the other one he needs to pay the usual ticket and find a spot on the street, which could be very difficult sometimes.
- Otherwise he thinks it is ‘ok’ driving in Malmö, of course as he points out the peak hours in the morning and afternoon is something he always tries to avoid. Furthermore he thinks the quality of the roads and the planning behind them are good and nothing to complain about.

Västra Hamnen 2

- Woman
- 50 +
- Lives in Ribersborg
- Takes her bicycle to work and other activities as padel for etc.
- She says she drives the car maybe once a week, or when she and her husband are traveling to their house 2 hours away. Another reason why she doesn't drive that much is because her daughter often takes the car to her job.
- She enjoys taking the bicycle to work, she works in Limhamn at the moment and she says it is refreshing and windy along the bicycle path from Västra Hamnen to Limhamn.
- She often takes her longer walks out in Västra hamnen, but she avoids it on the weekends and especially summer weekends because it's full of people and often it's a stressful environment with both bicycles and people walking in such a small area. She says it is the path where the wooden deck is, located in the western part of Västra hamnen.

- Västra Hamnen 3
- Man
 - Student
 - ~ 25 years
 - Lives in Rosengård Student Housing
 - Takes bus to school, bus line 5, to Niagara or Orkanen or Gäddan. Takes around 15-20 minutes. A few times a week.
 - From school walks or takes the bus to Ica Maxi in Västra Hamnen, takes 10 minutes. Then take the bus home to Rosengård Student-housing, around 20 minutes. Few times a month.
 - Take the bus to school and home from the grocery store because the bus line goes all the way, and often.
 - No need for a private car, close to everywhere. Good bus service.
 - do not take the bike for comfort/laziness. Don't know about bike routes from residents to school or Västra Hamnen. Used to think it's far to bike from Rosengård, but thinking more and more about biking as bus tickets get expensive. Although it is still too far and/or too cold to cycle to school or Västra Hamnen, there are cycling opportunities to other activities(other food shops or to town).
 - The bus tickets are expensive, some cheaper bus tickets could be good. At the same time, it is what can make you(me) cycle more.
 - "I sometimes walk to shop (at other places than) or into town to get out and save money for bus tickets. A bike would actually have worked just as well".
 -

- Västra Hamnen 4
- Man
 - 23+
 - Student/working
 - Works in Västra hamnen, takes the car to work everyday, parks it in the parking-house. 25-30 min trip with car, it takes the same time with public transportation so he prefer taking the car.
 - The car cause it's more comfortable and he can plan his time better, cost a bit more but he own a car and don't see it like an high expensive cause he work and get salary.
 - Takes more time with bus, don't like to watch the bus schedules and you have to walk more and switch buses.
 - A change would be to lower the prices for parking, its ridiculous how much the want to park a car.
 - I need my car always cause I can plan my time better, and its more comfortable to drive everywhere to do my needs, faster and better.

- Västra Hamnen 5
- Women
 - 50+
 - Lives in Västra hamnen
 - She drive car cause have an accident with her neck so it suits her better with car. But she thinks its smoother with bike especially in Västra hamnen.
 - She likes the buses in to Västra hamnen and thinks that public transport is good in Västra hamnen and in Malmö but a bit to expensive so she would prefer to take the car instead of the bus and train to example Lund. The money difference is not that big from car so then car is the first option she says.
 - Likes the parking spots in Västra hamnen but says that the roads in and out of Västra hamnen are very bad and it gets very trafficked and thats a bad thing. Should fix that problem.
 - Hopes that the prices will be lower for public transportation but support the bicycle and buses patterns that are made. But for her she takes the car.

- Västra Hamnen 6
- Man
 - 20 +
 - Lives in Västra Hamnen
 - Takes the bike everywhere he goes. Think it is the most efficient way of getting wherever he wants at any time of the day, and that's also the reason why he doesn't take the bus or walk, because he thinks taking the bike is the most cost-, time-, and health beneficial.
 - He doesn't really have anything to complain about when it comes to Västra Hamnens transportation infrastructure, though he was complaining about the construction project going on everywhere but he says he can’t really complain since it's a growing area.

